

Beyond Scarcity: A Theory of Sustainable Collectible Ecosystem

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Abstract

The resurgence of the Pokémon Trading Card Game (TCG) as both a collectible and an alternative asset presents a significant theoretical puzzle: How can a physical product with minimal intrinsic value generate sustainable economic and cultural value? Despite growing academic and practitioner interest in collectible markets, existing theoretical frameworks remain fragmented, often examining resource, stakeholder, and experiential dimensions in isolation rather than as components of an interconnected ecosystem. This study addresses this gap by developing a conceptual framework to explain sustainable value creation within TCG ecosystems. By synthesizing the Resource-Based View, Resource Orchestration Theory, Intellectual Capital Theory, Stakeholder Theory, and Experiential Marketing, this article develops an integrated model using the Pokémon TCG as an illustrative case, contextualized within Indonesia's emerging digital consumer landscape, where collector communities and secondary markets have grown rapidly. The proposed integrative framework identifies five interconnected mechanisms that jointly sustain collectible value: (1) the orchestration of intangible resources, encompassing human, structural, and relational capital embedded within collector communities; (2) the governance of stakeholder trade-offs among players, collectors, and investors with divergent motivations; (3) the creation of experiential rituals, including brewek, a culturally situated pack-opening practice; (4) the cultivation of community trust and social capital; and (5) the amplification of value through digital visibility. The study contributes to the strategic management literature by extending ecosystem and intellectual capital theories to the context of collectible-based creative industries. It offers a robust framework to guide future empirical investigations into the dynamics of sustainable collectible value creation while also providing practical insights for stakeholders navigating this emerging economic phenomenon.

INTRODUCTION

The contemporary business landscape is undergoing a fundamental shift in which value creation increasingly depends on intangible resources, digital communities, symbolic consumption, and ecosystem-based interactions. In creative industries, economic value is no longer determined solely by physical characteristics or production costs but is also shaped by brand meaning, perceived scarcity, community legitimacy, emotional attachment, digital visibility, and market trust. This transformation reflects a broader shift from product-dominant

logic toward ecosystem-based and co-created value, in which consumers actively participate in the value-creation process rather than merely receiving products.

The Trading Card Game (TCG) industry exemplifies this transformation, with the Pokémon Trading Card Game (Pokémon TCG) representing a particularly illustrative case. Since achieving widespread popularity in the late 1990s, the Pokémon TCG has experienced a remarkable resurgence, attracting collectors, investors, content creators, and researchers alike. The global trading card market reached \$15.8 billion in 2024 and is projected to grow to \$23.5 billion by 2030, with adult collectors increasingly driving demand for premium products. The Pokémon brand alone, celebrating its 30th anniversary in 2026, has generated an estimated US\$150 billion in lifetime revenue, demonstrating remarkable longevity and cultural influence. This resurgence raises important questions about how collectible cards are increasingly perceived as alternative assets alongside their traditional role as hobby products, with Pokémon cards reportedly appreciating more than 30-fold over the past two decades.

The transformation of TCG cards from ordinary printed products into high-value collectible assets represents a significant value paradox. A card with a relatively low production cost may achieve substantial value in the secondary market because of its rarity, edition, condition, character popularity, and community recognition. Recent empirical evidence from Heck et al. (2026), who conducted a one-year field study of 300 Pokémon cards sold through eBay, demonstrated that rare and holofoil cards contributed disproportionately to total revenue, with sale prices exhibiting a markedly skewed distribution. This paradox cannot be explained solely by product features or pricing strategies; rather, it reflects a broader ecosystem in which intangible assets, stakeholder interactions, market narratives, and consumer experiences jointly construct value.

Previous studies have examined various aspects of collectible consumption, brand communities, experiential marketing, and strategic ecosystems. Belk (1988) explored how possessions contribute to the extended self, while Holbrook and Hirschman (1982) and Schmitt (1999) established foundational perspectives on experiential consumption and marketing. Muniz and O'Guinn (2001) demonstrated the importance of brand communities in creating shared identity and meaning. Recent academic research has also investigated the effects of nostalgia on collector markets, with studies indicating that nostalgia can significantly influence demand for collectibles. Medlock (2024) applied gaming capital theory to *Magic: The Gathering*, illustrating how the acquisition of knowledge can ultimately generate nostalgic attachment to earlier periods of inexperience. Additionally, emerging research from the University of Porto (2026) has begun investigating Pokémon trading cards as alternative assets by examining their diversification properties alongside those of conventional financial assets.

Despite these valuable contributions, an integrative research gap remains in understanding how intellectual capital, stakeholder alignment, experiential marketing, and digital practices jointly contribute to the sustainability of TCG ecosystems and their development as collectible-based alternative assets. Most research on collectibles focuses on consumer behavior, market prices, or cultural consumption, whereas strategic management studies tend to emphasize platforms or digital ecosystems. There remains limited conceptual understanding of how intellectual capital—human, structural, and relational capital—stakeholder trade-off governance, digital experiential value, and community-based narratives interact to sustain value within TCG ecosystems over time. Furthermore, localized practices

such as *brewek* in Indonesia have yet to be formally integrated into international academic discourse on collectibles, experiential marketing, and digital consumption.

The urgency of this research is underscored by the rapid institutionalization of trading cards as an alternative asset class following the post-pandemic expansion of digital and alternative asset markets. In 2026, MemeStrategy launched what it described as the world's first tokenized Pokémon trading card investment fund, partnering with EVIDENT to provide institutional-grade access to the collectibles market. The global collectibles market is forecast to reach US\$628 billion by 2031, while the TCG segment is expected to grow from US\$14.7 billion in 2025 to US\$37.42 billion by 2034. This increasing institutional recognition, combined with the growing intersection of collectibles, digital communities, and creator-driven market narratives, makes understanding the mechanisms of sustainable value creation both academically and practically important. The Indonesian context provides a theoretically meaningful setting as an emerging market in which digital platforms, creator-led narratives, and community participation are accelerating the transformation of hobby products into collectible-based alternative assets.

The novelty of this research lies in the development of an integrative conceptual framework that synthesizes the Resource-Based View (RBV), Resource Orchestration Theory, Intellectual Capital Theory, Stakeholder Theory, and Experiential Marketing to explain sustainable value creation within collectible ecosystems. This study extends these strategic management perspectives to the underexplored context of collectible-based creative industries. Additionally, this research introduces *brewek* as a formal conceptual construct—an Indonesian community term describing the suspenseful, sensory, and socially shared ritual of opening trading card booster packs. To the best of our knowledge, *brewek* has not yet been formally conceptualized in the international academic literature, positioning this study to contribute to broader discussions of experiential marketing, digital spectatorship, and collectible consumption.

The primary purpose of this study is to develop theoretically grounded propositions that can guide future empirical research on sustainable value creation in collectible-based ecosystems. Specifically, this research seeks to address the following questions: (1) How does intellectual capital contribute to TCG ecosystem sustainability when orchestrated into capabilities consistent with the Valuable, Rare, Inimitable, and Organized (VRIO) framework? (2) How does resource orchestration transform intangible resources into ecosystem-level capabilities? (3) How do TCG firms and ecosystem actors govern trade-offs between player accessibility and collector-oriented scarcity? (4) How do experiential marketing and nostalgia strengthen community loyalty while potentially generating risks associated with hype and speculation? (5) How can *brewek* be conceptualized as a localized experiential consumption construct? and (6) How do TCG products evolve into collectible-based alternative assets through ecosystem-based value co-creation?

METHOD

Research Design

This study employed a qualitative illustrative case study design incorporating netnographic vignettes for theory-building purposes (Kozinets, 2002, 2015; Yin, 2018). The design was appropriate because the research sought to explain the transformation of physical

trading card game (TCG) products into ecosystem-based collectible assets, a relatively underexplored phenomenon in the strategic management literature. Rather than testing causal relationships or seeking statistical generalization, the study developed an integrative conceptual framework by synthesizing multidisciplinary literature with illustrative observations from publicly available digital content. This approach was consistent with the theory-building tradition of using qualitative case studies to generate theoretical propositions for subsequent empirical validation (Eisenhardt, 1989; Gioia et al., 2013).

Pokémon TCG was purposively selected as the illustrative case because it represented a mature TCG ecosystem characterized by global brand recognition, established competitive play structures, active collector communities, a robust secondary market, intergenerational appeal, and extensive digital visibility. Indonesia was selected as an emerging market context in which rapid digital adoption, creator-driven narratives, and strong community engagement provided a relevant setting for examining the localization and social legitimization of global collectible products. Examining a global phenomenon through an emerging-market context also supported the theoretical transferability of the findings to comparable collectible-based creative industries.

The Indonesian context was particularly relevant for examining how global collectible products were interpreted and circulated through local digital consumer culture. Its digitally active consumer environment provided a useful setting for exploring the interaction between global intellectual property, community narratives, and local consumption practices, including the ways scarcity and perceived collectible value were socially constructed.

The digital material consisted of four publicly available YouTube videos selected as illustrative qualitative vignettes rather than as a statistically representative sample. These materials were used to contextualize the theoretical propositions and examine how TCG value was narrated, presented, and socially interpreted in public digital spaces. Consequently, the analysis was intended to provide contextual and theoretical insights rather than population-level generalizations about Pokémon TCG consumers.

Data Corpus

The data corpus consisted of three categories of materials. First, academic literature was collected from the fields of strategic management, Resource-Based View, Resource Orchestration Theory, Intellectual Capital Theory, Stakeholder Theory, Experiential Marketing, brand community, nostalgia, digital ecosystem, and alternative asset value. Second, market-related academic evidence was incorporated, particularly the field study by Heck et al. (2026) on Pokémon trading card sales characteristics. Third, publicly available digital artifacts were observed as illustrative qualitative vignettes to understand how TCG value is narrated and experienced in digital communities.

The digital vignette corpus consisted of four publicly accessible YouTube videos related to Pokémon TCG and Indonesian digital culture: Raditya Dika's "Ratusan Juta Buat Pokemon," Raditya Dika's "Penampakan Kartu Pokemon Rp 600 Juta," Pokémon Indonesia's "[Resmi] Ayo Koleksi, Bertukar, dan Bermain Pokémon Game Kartu Koleksi! Featuring Raditya Dika," and Pokémon Indonesia's "POKÉMON INFLUENCER CHAMPIONSHIP | BEHIND THE SCENE WITH RADITYA DIKA." These materials were treated as illustrative digital artifacts for contextual netnographic observation rather than as a stand-alone empirical dataset, statistical sample, or complete representation of the Indonesian TCG population.

The unit of analysis in the netnographic vignettes was not the video as a whole, but observable expressions, narratives, and interactions related to TCG value creation. These units included verbal expressions of excitement during pack-opening moments, visual reactions to rare card pulls, discussions of card prices, references to nostalgia, comments about investment potential, creator-led explanations of collectible value, and audience responses to scarcity or alternative asset narratives. This unit of analysis was selected because TCG value in digital spaces is constructed through repeated emotional, symbolic, and social expressions rather than through ownership alone.

The digital artifacts were selected based on four criteria. First, they were publicly accessible. Second, they directly discussed or displayed Pokémon TCG collecting, gameplay, pack-opening, or community activities. Third, they involved public figures, official brand channels, or recognizable digital creators in the Indonesian context. Fourth, they provided observable narratives related to card value, collecting excitement, audience engagement, nostalgia, or community meaning.

Data Collection Procedure

Data collection was conducted through structured online observation. First, relevant keywords were identified, including “Pokémon TCG Indonesia,” “kartu Pokémon mahal,” “buka pack Pokémon,” “brewek Pokémon,” “Raditya Dika Pokémon,” and “Pokémon card collection.” Second, publicly available videos and digital materials were screened based on their relevance to the research questions. Third, materials that focused on pack-opening experience, card valuation, collecting behavior, nostalgia, community activity, or audience reaction were retained for analysis. Fourth, relevant observations were documented in an observation matrix.

The observation matrix included the following categories: source type, title, publication year, main topic, observed experience, stakeholder actor, value narrative, emotional expression, initial code, axial category, and theoretical interpretation. This procedure was designed to improve transparency in the use of illustrative digital vignettes. Because the study is designed as a qualitative illustrative case study with a theory-building purpose, the digital materials were used to support conceptual interpretation rather than to make statistical claims about the broader population of TCG consumers.

Data Analysis

The data were analyzed using thematic interpretation supported by open, axial, and theoretical coding. First, open coding was used to identify recurring expressions and practices related to TCG value creation, such as rarity, holofoil attraction, nostalgia, pack-opening excitement, audience reaction, investment narrative, authenticity concerns, community trust, and speculative behavior. Second, axial coding was used to group these codes into broader categories, including intellectual capital, artificial scarcity, resource orchestration, stakeholder trade-off governance, experiential value, digital pack-opening experience, community legitimacy, and alternative asset value. Third, theoretical coding was used to connect these categories with the Resource-Based View, Resource Orchestration Theory, Intellectual Capital Theory, Stakeholder Theory, and Experiential Marketing.

In the coding process, *brewek* was treated as a sensitizing concept rather than as a pre-existing universal construct. The analysis examined how pack-opening practices were narrated through expressions of suspense, surprise, sensory pleasure, collective reaction, and perceived

value. This allowed the study to elevate brewek from a local community expression into a conceptual category that explains how digital pack-opening rituals create experiential and relational value in the TCG ecosystem.

To strengthen the credibility of the analysis, triangulation was applied by comparing academic literature, market-related empirical evidence, and digital artifacts. The findings from the field study by Heck et al. (2026) were used to support the economic relevance of rarity and holofoil effects, while digital artifacts were used to illustrate how these characteristics become part of community narratives and digital experience. Triangulation helps improve qualitative credibility by comparing multiple sources of evidence (Denzin, 2018; Patton, 2002). The analysis resulted in seven theoretical propositions and a conceptual framework for sustainable TCG ecosystems.

RESULTS AND DISCUSSION

The analysis yielded seven interconnected themes that collectively form the foundation of the proposed conceptual framework for sustainable TCG ecosystems. Each theme is presented with supporting evidence from the illustrative digital artifacts and academic literature, followed by theoretical interpretation and practical implications.

Intellectual Capital as the Strategic Foundation of Ecosystem Value

The first key theme establishes that intellectual capital functions as the strategic foundation of TCG value creation. Unlike conventional consumer goods whose value derives from physical attributes or production costs, TCG value emerges from intangible assets embedded within the ecosystem. Human capital manifests through the creative contributions of illustrators, designers, game developers, community managers, and digital content creators whose skills sustain consumer interest and engagement. Structural capital operates through the institutional infrastructure of intellectual property rights, rarity classifications, official tournament rules, authentication mechanisms, and release schedules that provide order, legitimacy, and shared standards for participation. Relational capital is realized through brand-community networks, marketplace interactions, and the influencer-audience relationships that socially validate card desirability and meaning.

This tripartite conceptualization aligns with Bontis (1998) and Nahapiet and Ghoshal (1998), who established intellectual capital as the sum of knowledge assets that firms and ecosystems can utilize for competitive advantage. The digital artifacts observed in this study—particularly the creator-led narratives in Raditya Dika's content—demonstrate how human capital (the creator's storytelling ability) interacts with structural capital (Pokémon's established rarity systems) and relational capital (community reactions and discussions) to construct value. For instance, the dramatization of discovering a rare card transforms a simple ownership moment into a socially shared event that amplifies perceived worth. This finding supports Proposition 1: TCG ecosystem sustainability depends not merely on the possession of intellectual capital, but on the ability to transform human, structural, and relational capital into VRIO-consistent ecosystem capabilities.

Resource Orchestration as the Bridge Between Assets and Value Creation

The second theme demonstrates that intellectual capital and scarcity mechanisms do not automatically generate sustainable value; rather, resource orchestration serves as the critical bridge between assets and value creation. Drawing on Sirmon et al. (2007, 2011), the analysis

reveals that value emerges when resources are systematically structured, bundled, and leveraged across ecosystem actors. Structuring occurs when brand owners define card types, rarity categories, and product release schedules. Bundling occurs when these resources are combined with artwork, gameplay mechanics, storytelling, and community events. Leveraging occurs when these bundled resources are activated through tournaments, digital content, and marketplace activities.

The digital artifacts provide compelling illustrations of this orchestration process. In the Pokémon Indonesia official content (2022), the brand explicitly connects intellectual property with community participation, structuring the ecosystem to include gameplay, collecting, and trading as complementary activities. Raditya Dika's content (2026a, 2026b) further demonstrates how creator narratives leverage these structured resources, dramatizing the discovery of rare cards and converting private collection moments into public entertainment that drives engagement and perceived value. Heck et al. (2026) provide empirical support for this orchestration effect, demonstrating that the premium prices of rare and holofoil cards are not merely functions of production cost or visual appeal, but outcomes of multi-actor orchestration involving authentication, grading, and community recognition. This supports Proposition 2: Resource orchestration strengthens TCG ecosystem value when intangible resources are structured, bundled, and leveraged into mutually reinforcing capabilities across product, community, marketplace, and digital content domains.

VRIO Logic as the Foundation of Sustained Competitive Advantage

The third theme applies the VRIO framework (Barney, 1991; Pathak et al., 2024; Wernerfelt, 1984) to explain sustained competitive advantage at the ecosystem level. The TCG ecosystem is valuable (V) because it simultaneously generates emotional value (nostalgia, excitement), symbolic value (status, identity), gameplay value (strategic engagement), community value (social belonging), and economic value (monetary returns for collectors and investors). It is rare (R) because only a limited number of brands—Pokémon, Magic: The Gathering, and a few others—possess the combination of globally recognized intellectual property, intergenerational appeal, and trusted rarity structures. It is difficult to imitate (I) because the historical depth, cultural meaning, and relational trust embedded in the ecosystem cannot be easily replicated by new entrants. It is organized (O) because brand owners and ecosystem actors coordinate product releases, tournament systems, authentication practices, and stakeholder participation in ways that sustain long-term value creation.

This VRIO interpretation provides a strategic lens for understanding why the TCG ecosystem generates sustained competitive advantage rather than temporary popularity. The ecosystem's strength lies not in any single card or isolated product release, but in the orchestrated interaction among strategic resources, emotional experiences, and community legitimacy. This finding aligns with the dynamic capabilities perspective (Teece, 2007; Helfat & Peteraf, 2003), which emphasizes that sustained advantage requires not just resource possession but the ability to reconfigure resources in response to changing market conditions.

Artificial Scarcity as Structural Capital

The fourth theme examines artificial scarcity as a form of structural capital that organizes how value is perceived and exchanged. Scarcity in TCG is designed through rarity classifications, limited editions, promotional releases, and controlled distribution, shaping consumer perception and creating excitement. The analysis reveals that these mechanisms

function as structural capital because they create a shared language of value within the community, enabling consumers to understand which cards are rare, which products have recognized worth, and which formats are collectible.

Heck et al. (2026) provide empirical support for this argument, demonstrating that rarity has measurable economic relevance in the Pokémon card secondary market. Their field study found that rare cards contributed substantially more revenue than common cards, with sales prices showing markedly skewed distribution. However, the analysis also reveals a critical boundary condition: artificial scarcity must be carefully managed. If scarcity becomes excessive, new players face barriers to participation; if products become too abundant, collector value weakens; if scarcity is perceived as manipulative, community trust declines. This tension echoes findings in related collectible markets, where Aquino and Gershenson (2024) documented that nostalgia effects on pricing depend significantly on perceived scarcity credibility.

Community as Relational Capital and Value Co-Creation

The fifth theme positions community as relational capital essential for sustaining TCG ecosystem value. Communities create interpretation, legitimacy, demand, and continuity by discussing card desirability, sharing collection stories, evaluating market trends, and organizing play sessions. Online communities expand information flow and create visibility, while local game stores provide physical spaces for tournaments, trading, and social bonding.

The analysis reveals that TCG value is fundamentally co-created. Brand owners produce cards, but communities interpret and sustain their meaning. Collectors, players, and digital communities collectively decide which cards become iconic, desirable, or historically important. This finding aligns with Muniz and O'Guinn's (2001) brand community theory, which demonstrates that shared identity and social norms create collective meanings around products. The observation of Raditya Dika's YouTube content (2026a, 2026b) illustrates how creator-audience interactions amplify this relational capital, transforming private collection practices into public entertainment that strengthens community bonds and perceived value. This emphasizes the importance of local game stores, which, despite digital marketplaces, remain crucial for long-term loyalty through social interaction, learning, trust, and community identity.

Stakeholder Trade-Off Governance and Ecosystem Sustainability

The sixth theme addresses stakeholder trade-off governance as a critical mechanism for ecosystem sustainability. TCG ecosystems involve multiple stakeholder groups with divergent interests: players seeking affordable access and balanced gameplay; collectors prioritizing rarity and long-term value; investors focusing on liquidity and price growth; local stores requiring stable supply and active events; content creators seeking audience engagement; and brand owners pursuing profitability and brand longevity.

Drawing on Freeman's (1984) stakeholder theory, the analysis reveals that ecosystem sustainability requires not merely stakeholder alignment but effective governance of inherent tensions. If the ecosystem becomes too investor-driven, prices rise beyond the reach of players and new collectors. If it becomes too focused on gameplay accessibility, collector excitement and scarcity value decline. If brand owners release too many products, scarcity weakens; if they release too few, access becomes unfair. The core governance challenge is managing the structural tension between utility value (players) and symbolic/economic value (collectors and

investors). This supports Proposition 3: Ecosystem sustainability in TCG markets is determined not by pure stakeholder alignment, but by the capacity to govern inherent trade-offs among player accessibility, collector scarcity, investor expectations, and community trust.

Experiential Marketing, Intergenerational Nostalgia, and Emotional Value

The seventh theme integrates experiential marketing and intergenerational nostalgia as drivers of long-term demand and community loyalty. TCG consumption is fundamentally experiential, encompassing sensory experiences (artwork, packaging, holofoil effects), affective experiences (excitement, surprise, nostalgia, pride), cognitive experiences (gameplay strategy, collection planning), behavioral experiences (buying, trading, playing), and social experiences (community interaction, digital sharing).

Schmitt's (1999) experiential marketing framework provides the theoretical foundation for this theme, while nostalgia theory (Schindler & Holbrook, 2003) explains how past memories connect with present consumption. Many adult consumers return to TCG because of childhood memories, with their purchasing behavior driven by the desire to reconnect with earlier experiences and emotional moments. Nostalgia also supports intergenerational continuity, as adult collectors introduce TCG to younger family members, creating a cycle of renewed demand. The analysis reveals that nostalgia strengthens alternative asset value because emotionally meaningful products attract stronger long-term demand. However, experiential marketing also carries risk: the same excitement that strengthens loyalty may intensify hype-driven consumption, particularly when consumers are encouraged to chase rare pulls without adequate understanding of uncertainty, authenticity, or market volatility. This supports Proposition 4: Experiential marketing strengthens community loyalty in TCG ecosystems when emotional excitement is balanced by authenticity, trust, and responsible governance; otherwise, it may intensify hype-driven fragility. Proposition 5 is also supported: Intergenerational nostalgia enhances the alternative asset value of TCG products when anchored in scarcity credibility, authenticity, and community recognition.

The Digital Brewek Experience as Experiential and Relational Value

The eighth and novel theme conceptualizes the digital brewek experience as an extension of experiential marketing in the TCG ecosystem. Brewek is defined as a culturally embedded, high-suspense, sensory, and socially shared ritual of opening booster packs, where the value of consumption emerges from anticipation, sound, tactile action, visual reveal, emotional reaction, and collective interpretation surrounding the opening moment. In physical settings, brewek is experienced through touch, sound, and visual interaction; in digital settings, this experience is extended through videos, livestreams, short clips, and online audience reactions.

This finding resonates with Holbrook and Hirschman's (1982) classic work on experiential consumption, which emphasized that consumption is often about fantasies, feelings, and fun rather than mere utility. The digital observation reveals that viewers experience excitement even when they do not own the cards being opened, indicating that TCG consumption has shifted from individual ownership to shared spectatorship. The audience becomes part of the value creation process by watching, commenting, reacting, and circulating content. Raditya Dika's content (2026a, 2026b) serves as an illustrative case of how content creators function as institutional entrepreneurs, mainstreaming collectible narratives and driving the socio-cultural legitimacy of alternative assets. The findings of Heck et al. (2026)

support the economic relevance of rarity and holofoil effects, which are central to the visual surprise and drama that drive audience engagement during brewek.

The brewek phenomenon also strengthens the role of nostalgia, as many adult collectors enjoy opening packs because it reconnects them with childhood memories. In digital media, this nostalgia becomes collective because audiences can experience the emotional moment together. However, brewek also illustrates the tension between engagement and speculation; the uncertainty of pack-opening can create joy and community bonding, but it may also intensify fear of missing out and repeated purchasing behavior. This supports Proposition 6: Digital brewek experience strengthens TCG ecosystem engagement by amplifying sensory, emotional, and social value, provided that the suspense of pack-opening is supported by authenticity, transparency, and ecosystem trust.

Ecosystem Boundary Conditions and Tipping Points

The ninth theme establishes boundary conditions that determine whether ecosystem mechanisms generate sustainable value or instability. Three conditions are particularly important: scarcity credibility, stakeholder trade-off governance, and ecosystem trust. Excessive reprinting or overprinting may weaken perceived rarity, reducing willingness to pay premium prices and undermining long-term trust in the collectible market. If one stakeholder group becomes too dominant, the ecosystem may become unstable—for example, speculative investors driving prices beyond the reach of regular players may reduce gameplay participation and weaken the ecosystem's social base. Trust is essential because TCG value depends heavily on authenticity, grading credibility, community legitimacy, and transparent market practices.

These boundary conditions show that TCG ecosystem sustainability is not automatic; the same mechanisms that create value can also create fragility when poorly governed. Counterfeit cards, misleading digital content, excessive hype, and unreliable grading practices may damage confidence in the ecosystem. This finding aligns with the broader stakeholder governance literature, which emphasizes that long-term sustainability requires credible governance mechanisms (Freeman, 1984). This supports Proposition 7: The positive relationship between TCG ecosystem engagement and alternative asset value is strengthened when scarcity credibility, stakeholder trade-off governance, and ecosystem trust are maintained.

TCG as an Ecosystem-Based Alternative Asset

The final theme synthesizes the analysis to conceptualize TCG as an ecosystem-based alternative asset. TCG cards acquire alternative asset characteristics when they are scarce, recognizable, tradable, authentic, and supported by active communities. Their value is sustained by a combination of symbolic meaning and market participation. However, TCG as an alternative asset contains significant risks: prices may be affected by hype, speculation, counterfeit products, grading controversies, liquidity shifts, and changing consumer preferences. Authentication mechanisms, transparent grading, responsible community education, and healthy marketplace practices are needed to protect trust.

This finding contributes to the emerging academic literature on collectibles as alternative assets. Recent work from the University of Porto (2026) has begun investigating Pokémon trading cards as alternative investments, examining their diversification properties alongside conventional financial assets. The present study extends this literature by demonstrating that alternative asset value in TCG is not merely a market phenomenon but

fundamentally an ecosystem governance issue. Digital visibility can increase market attention but also intensify speculative behavior, requiring ecosystem actors to balance excitement with education, and visibility with responsibility. A sustainable TCG ecosystem should preserve the joy of collecting while preventing excessive financialization that may damage community trust.

Comparison with Previous Research

The findings of this study both extend and challenge previous research. Consistent with Belk (1988), the analysis confirms that possessions contribute to the extended self, with TCG cards serving as extensions of collector identity. Aligning with Muniz and O'Guinn (2001), the findings demonstrate that brand communities create shared identity and social norms around products. The study extends Schmitt's (1999) experiential marketing framework by introducing the digital brewek experience as a novel experiential modality. The integration of Heck et al. (2026) provides empirical validation of rarity and holofoil effects in the secondary market, while the stakeholder governance perspective extends Freeman's (1984) theory to collectible ecosystems. The study also responds to the call for research on collectibles as alternative assets (University of Porto, 2026) by providing a strategic management framework for understanding ecosystem-based value creation.

Practical Implications

The practical implications for creative industry firms and ecosystem actors are significant. Collectible products should not be managed as physical commodities but as ecosystems of meaning, experience, and trust. Firms must protect intellectual property, design fair scarcity mechanisms, support local communities, and maintain stakeholder trade-off governance. Digital content creators should adopt responsible storytelling practices that balance excitement with education, while marketplace actors should invest in authentication mechanisms to protect trust. Local game stores remain crucial for social foundation, and community engagement should be nurtured through both physical and digital channels. Ultimately, ecosystem sustainability requires preserving the joy of collecting while preventing excessive financialization that may damage community trust and long-term value.

Ringkasan Hasil dan Pembahasan dalam Bahasa Indonesia

Analisis data mengungkapkan tujuh tema utama yang secara kolektif membentuk kerangka konseptual untuk ekosistem TCG yang berkelanjutan. Temuan pertama menetapkan bahwa modal intelektual, yang terdiri dari modal manusia, struktural, dan relasional, berfungsi sebagai fondasi strategis penciptaan nilai TCG. Temuan kedua menunjukkan bahwa orkestrasi sumber daya berfungsi sebagai jembatan antara aset dan penciptaan nilai, di mana sumber daya harus distruktur, dibundel, dan dimanfaatkan di seluruh ekosistem. Temuan ketiga menerapkan kerangka VRIO untuk menjelaskan keunggulan kompetitif berkelanjutan di tingkat ekosistem. Temuan keempat mengkaji kelangkaan buatan sebagai modal struktural yang mengatur bagaimana nilai dipersepsikan dan dipertukarkan. Temuan kelima memposisikan komunitas sebagai modal relasional yang esensial bagi keberlanjutan nilai ekosistem. Temuan keenam membahas tata kelola kompromi pemangku kepentingan sebagai mekanisme kritis bagi keberlanjutan ekosistem. Temuan ketujuh mengintegrasikan pemasaran eksperiensial dan nostalgia antargenerasi sebagai pendorong permintaan jangka panjang dan loyalitas komunitas. Temuan kedelapan mengkonseptualisasikan pengalaman brewek digital sebagai perluasan pemasaran eksperiensial dalam ekosistem TCG. Temuan kesembilan menetapkan kondisi batas yang menentukan apakah mekanisme ekosistem menghasilkan nilai berkelanjutan atau

ketidakstabilan. Temuan akhir mensintesis analisis untuk mengkonseptualisasikan TCG sebagai aset alternatif berbasis ekosistem. Perbandingan dengan penelitian sebelumnya menunjukkan konsistensi dengan temuan Belk (1988), Muniz dan O'Guinn (2001), dan Schmitt (1999), serta memperluas kerangka pemasaran eksperiensial melalui pengenalan pengalaman brewek digital. Implikasi praktisnya menekankan bahwa produk koleksi tidak boleh dikelola sebagai komoditas fisik tetapi sebagai ekosistem makna, pengalaman, dan kepercayaan, dengan perlindungan kekayaan intelektual, mekanisme kelangkaan yang adil, dukungan komunitas lokal, dan tata kelola kompromi pemangku kepentingan sebagai prioritas manajemen.

CONCLUSION

This study developed an integrative conceptual framework to explain sustainable value creation in trading card game (TCG) ecosystems, using the Pokémon Trading Card Game (Pokémon TCG) as an illustrative case within the Indonesian digital consumer context. Grounded in the resource-based view (RBV), Resource Orchestration Theory, Intellectual Capital Theory, Stakeholder Theory, and Experiential Marketing, the analysis revealed that TCG value emerged not solely from the physical attributes of cards but from the orchestrated interaction of intangible resources, stakeholder governance, experiential practices, and community-based value co-creation. Seven interconnected mechanisms were identified: intellectual capital as a strategic foundation; resource orchestration as a bridge between assets and value creation; VRIO-consistent capabilities as sources of sustained competitive advantage; artificial scarcity as structural capital; community as relational capital; stakeholder trade-off governance; and experiential marketing combined with intergenerational nostalgia as drivers of long-term demand. The study formally conceptualized brewek as a culturally embedded, digitally amplified pack-opening ritual that transformed private discovery into public spectacle and relational value. It also established three ecosystem boundary conditions—scarcity credibility, stakeholder governance, and ecosystem trust—that determined whether these mechanisms generated sustainable value or ecosystem instability.

The study made four theoretical contributions: extending strategic management theories to collectible-based creative industries; refining Stakeholder Theory through the concept of trade-off governance; advancing Experiential Marketing through the digital brewek construct; and formally conceptualizing brewek for broader academic discourse. From a practical perspective, creative industry firms should manage collectible products as ecosystems of meaning, experience, and trust by prioritizing intellectual property protection, credible and equitable scarcity mechanisms, community support, responsible digital storytelling, and transparent governance. The study was limited by its qualitative illustrative design, reliance on a limited set of digital artifacts, and absence of primary data collection. Future research should employ full-scale netnography using larger digital corpora, conduct interviews with ecosystem actors, quantitatively test the proposed theoretical relationships, and undertake comparative studies across TCG brands and emerging markets to validate and extend the proposed framework.

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